

### COLMAN'S RURAL WORLD

**FORMAN J. COLMAN, Editor.**  
**LEVI CHUBBOK, Editor.**

Published every Wednesday, in Chemical building, corner of Eighth and Olive streets, St. Louis, Mo., at one dollar per year. Eastern office, Chalmers D. Colman, 630 Temple Court, New York City. Advertisers will find the RURAL WORLD the best advertising medium of its class in the United States. Address all letters to COLMAN'S RURAL WORLD, Chemical Building, St. Louis, Mo.

While the RURAL WORLD is published at one dollar a year, it has temporarily allowed old subscribers to send actually NEW OR TRIAL subscribers with their own subscriptions at fifty cents a year, in order to largely increase the circulation and influence of the paper. This price is less than the cost of the white paper, presswork, folding, wrapping, mailing and preparing the postage, saying nothing of any other of the large expenses of maintaining offices, paying salaries and conducting such a paper in a large city. Renewals, unless accompanied by one of more NEW subscribers must be at one dollar a year. All names are dropped as soon as subscriptions expire. The month named on the address tag, pasted on each issue, shows the month subscriptions expire, and renewals should be made two or three weeks before, so that names shall not drop out of list. It is gratifying to the proprietor to be able to state, in his half century's experience in conducting this paper, it has never enjoyed the patronage and prosperity it now does. Its circulation is increasing in a wonderful degree, and its advertising patrons, many of whom have used its columns for a quarter or a third of a century, are more than pleased with results. Let all our friends unite and press forward in extending its sphere of influence. It will do for others what it is doing for you, so get others to join the great RURAL WORLD army and receive the same benefit.

The Department of Agriculture at Washington is to have a new building. Our Washington correspondent tells us we are glad to know this. Those of our readers who have visited the capital city and noted how the Department of Agriculture is housed, compared with the provisions made with other governmental departments, will readily admit that it is high time that this department should be provided with a building suitable in size and appointments to its needs.

#### A TENNESSEE "TEST ACRE."

We are pleased to know of our Tennessee correspondent's determination to have a "test acre," as mentioned on this page. As to how to manage it, local conditions can best determine. Testing seed from different latitudes will be interesting and valuable, although that is work which would be better undertaken by experiment stations, because it will take a number of trials and seasons to determine the point satisfactorily.

Where we manage a "test acre," we would confine the effort at first largely to tests of culture and of fertilizers, to determine which were best suited to our soil and climate. These tests would involve fundamental principles in agriculture, and when the points are determined for various crops, one has acquired, to a considerable extent, a mastery of farming problems. Big and profitable crops depend very largely on one's knowing what and how to feed them, and how to cultivate the soil so the plants can best get their food.

Let us hear from others who will plant "test acres."

#### FARMERS WERE HONORED.

Among this week's "Pebbles from the Potomac" is one in which the American farmer should be particularly interested. An honored guest of the President at the recent inauguration was the man who runs the President's farm. This farm of 162 acres is no larger than thousands upon thousands of American farmers possess—about an average sized farm—and, judging by the stock kept, is run on the mixed farming plan, as are the vast majority of our farms.

Doubtless "Uncle Jack" is a pretty good sort of "renter"—but we do not doubt that there are many "renters" among the RURAL WORLD readers who would run the McKinley farm just as well and successfully as he does. But it is pleasing to think that the President of the United States owns a quarter-section farm in which he has a lively interest, and that he has so much regard for "Uncle Jack," his "renter," that this worthy person is invited to the White House on an occasion of surpassing splendor. Through "Uncle Jack" Adams the American farmers have been honored.

#### SAVE THE FORESTS.

The statements made by Mr. D. C. Burson in this and last week's issues of the RURAL WORLD relative to cultivating forest trees, should be thoughtfully considered. True, planting and cultivating forest trees is not a "get-rich-quick" way of making money, but there is little doubt as to the certainty of the profits from it. The last point made by Mr. Burson is one of the strongest. "One-fourth of the land kept covered with a growth of forest trees, the other three-fourths would raise more stock, grains, fruit and vegetables than could possibly be raised on the entire land were it all clear of trees."

We have before us a communication from California relative to what unrestrained human greed is doing in the Redwood groves of California. Those "Big Trees" of the Sierra Nevada are the oldest of living things—older than the pyramids of Egypt—4,000 years old at the beginning of the Christian era—standing 400 feet high and with a base circumference of 100 feet—and are in danger of destruction.

#### THE DAIRY INDUSTRY RECOGNIZED

We are pleased to note that the 41st General Assembly of Missouri, which has just adjourned, gave the dairy industry very substantial recognition. It refused to consider a bill that was slipped in which was intended to make easier the fraudulent selling of imitation butter. On the other hand, a bill was passed which amended the anticolor law and will greatly aid the Board of Agriculture in enforcing the law.

Provision was also made by appropriating \$40,000 for the erection and equipment on the Agricultural College farm of a dairy and live stock building. This building is to be equipped with a complete outfit of butter and cheese making apparatus and all facilities for instruction in up-to-date dairying.

And last, but by no means least, the suggestion of the Missouri Dairy Association was accepted to send a bill passed directing the Board of Curators of the State University to establish in the Agricultural College a Chair of Dairy Husbandry. The bill carried an appropriation of \$5,000 for the next biennial period. The appointee to this chair, by the terms of the law, is not only to teach dairying to the students of the Agricultural College, but, first of all, he is instructed by lectures in various parts of the state, at farmers' institutes, through the press and in bulletins, to do what he can to develop the dairy industry of the state. This is what the Dairy Association has been trying to bring about since its organization ten years ago. To some of its members the fulfillment of their hopes in this direction has seemed to be long deferred; but even a decade of hard, persistent work was well spent with the accomplishment of this result. A new era has dawned to the dairy industry of Missouri, and the coming decade will see a growth at its close which will seem marvelous. The dairymen of Missouri should bear in grateful remembrance the 41st General Assembly.

#### MISSOURI FARMERS' INSTITUTE.

The Missouri State Board of Agriculture is holding a series of farmers' institutes in the western part of the state, supplementing, we presume, the series held last summer. The RURAL WORLD has not been informed by the secretary of the board as to how many institutes are to be held, or when and where. From a reader, Sidney D. Frost, of Caldwell County, we receive the following report of the institute held March 11, at Mirabile, Mo.:

On last Monday Mirabile held her first Farmers' Institute. About 150 representative farmers were present and a very profitable and enjoyable meeting was had. The following program was given at the afternoon and night sessions:

"Benefit of Farmers' Institutes," by G. W. Waters of Canton, Mo.  
"Sheep Husbandry," by James Elliott, Mirabile, Mo., discussion of same by J. R. Sprague, Charles Jones and others.  
"Cattle Feeding," by J. R. Paxton; discussion of same led by Col. G. W. Waters.

"Chase Making and Dairying," compared by G. A. Umstott.  
Col. Waters also made short talks on How to Preserve the Fertility of the Soil, and the Economy of Balanced Rations for all kinds of Stock. He quoted from experimental tests to prove his argument and made a thoroughly instructive talk.

The meeting was held under the auspices of the State Board of Agriculture. Col. Waters being sent as a most valuable helper. The paper on "Sheep Husbandry" and its discussion were pronounced by many as the best they ever heard. The papers were all excellent and the meeting was very enthusiastic.

A permanent Farmers' Club was organized, with Judge L. L. Frost as president, and G. A. Umstott as secretary. It starts in with a large membership, and will hold monthly meetings. Its success is assured. The State Board of Agriculture has decided to hold the next Farmers' Caldwell County Institute at Mirabile, and the following committee of arrangements was chosen: Judge L. L. Frost, G. A. Umstott, J. R. Paxton, John Van Olinda and James Elliott. The County Institute will be held next fall, and everybody should get ready for a big meeting.

#### FIFTY YEARS OF AGRICULTURAL PROGRESS.

In celebrating the one hundredth anniversary of the Louisiana Purchase by holding a World's Fair in St. Louis 1893, an effort will be made to tell, through object lessons, the story of what the century has wrought, not only in the Louisiana Purchase, but in the world at large—for all the nations of the earth will be represented here by their products of skill and learning. In many instances interests and industries of commanding importance will be represented which were unknown to man at the beginning of the century, the end of which the Fair will mark. Others will be many centuries old. Oldest of all will be that of agriculture, the beginning of which was beyond the dawn of history; yet, paradoxical as it may sound, agriculture is one of the modern industries in respect to present practices. Modern agriculture was not born until the Louisiana Purchase had been United States territory a half a century. Its period of development is spanned by the active careers of men yet in harness.

Liebig, who was born in 1803, the year the Louisiana Purchase became United States territory, is justly called the father of modern agriculture; for it was his researches in organic chemistry and the application of this to agriculture about 1840-50 that gave this most important of the world's industries a new birth. Following rapidly after came the development of other sciences—botany, entomology, bacteriology, physics—and their application to the practical operations of the farm. Through the study of botany has come, for example, a knowledge of how to produce new varieties of valuable fruits, flowers and grains by cross fertilization. The entomologist has taught us the economic value of certain insects and how to follow them and the physicist and later the electrician, are contributing mightily toward the growth of agriculture since its new birth 50 years ago.

In view of these facts we suggest to the management of the St. Louis World's Fair that effort should be made to show what 50 years has wrought in the development of this the basic industry of the world.

#### WESTERN KENTUCKY LETTER.

Notes—Blackleg—White Minorcas Wanted—hen eggs.

Editor RURAL WORLD: I live on the Tennessee river 30 miles above Paducah. The farmers here are making big preparations for crops this year. The winter has been warm and dry, fine for work. This is not a good wheat section, but the crops are black and blighted, as though they had been bruised. The larger animals were not affected. I hear of a few other similar cases. We would like to learn through the RURAL WORLD what was the matter. I would like to know where I can get white minorcas. Good horses and mules are selling well.

Cattle have come through the winter in good condition, excepting that a disease has caused some loss. I lost four calves and yearlings. They were in good flesh. They got lame when in the hind legs, then in the front one, and died in from 12 to 24 hours. When examined the parts were black and bloody. The winter though they had been bruised. The larger animals were not affected. I hear of a few other similar cases. We would like to learn through the RURAL WORLD what was the matter. I would like to know where I can get white minorcas. Good horses and mules are selling well.

The disease that affected Mr. Haven's cattle was undoubtedly blackleg. We direct his attention to the advertisement of the Pasteur Vaccine Company on page 4 of this issue, and suggest that he write to the company for full information regarding the disease and method of preventing.

#### ILLINOIS LETTER.

Editor RURAL WORLD: The winter was very fine until about the first of February. Since then the weather has been very changeable. This has been the finest winter to feed stock that has ever known in this section.

I live about 12 miles north and east of the Mississippi river. The land is rolling and the soil is of a clayey nature. It is very fertile, and even corn and clover spring every year. Our principal crops are corn and oats. At this time the wheat is looking well; but the past few years it has been a failure.

The farmers are raising more stock every year. More money is made on stock than anything else. Stock cattle have been very high. Calves at weaning time bring from \$15 to \$18 a head. Hogs are also raised to quite an extent in this vicinity.

This is quite a section for poultry. I believe our wives could take 200 hens and make more of them than the average farmer makes on 40 acres of land. Will some of the correspondents give me some information about the Housley Fry.

Do the sprouts from the seed of a grafted peach produce the same kind of fruit? Pike Co., Ill. M. C. TRAUTWINE.

A tree grown from the seed of a peach borne on a grafted tree 200 years old, possibly, but not probably, produce fruit like that of the seed of which was planted. The seed of the peach is ordinarily a cross resulting from the union of the female organs of the peach blossom with the pollen from the male organs of a blossom of another peach tree.—Editor.

#### A TENNESSEE LETTER.

Weather Notes—"Test Acre"—Farmers' Institute.

Editor RURAL WORLD: It seems that the Tennessee correspondents are either napping or gone on a journey. Our winter has been fine throughout. The coldest was last week, when the mercury dropped to within 10 degrees of zero. The early sown wheat is not likely to recover from the raid of the fly made upon it last fall. The late sown wheat and all the rye and winter oats look well. Our prospects for abundance of fruit are good. Only one thing we now fear—late frosts. These usually come the first week in April, when peaches and pears are in full bloom.

I have now been in this state three years, less 16 days, and I do not regret my acquaintance with Tennessee and her people. It would require at least 90 per cent advance on the purchase price of my little home, 47 acres, to buy it now.

I intend to follow the plan of your Howell Co. (Mo.) correspondent and plant one acre in a variety of crops. I am getting seeds from New York, Iowa and Wisconsin. Some think I make a mistake in getting seeds from so far north. To test that question I will get some from Philadelphia, Pa.

Most farmers are well along with their plowing for spring crops, and the acreage will be much larger than last spring.

Our Farmers' Institute, organized now over a year ago, through the enthusiastic efforts of the Hon. Mr. Rossmann of West Tennessee, is getting in some good work. Farmers are beginning to learn the necessity of better and more thorough methods of farm work. Diversified farming is also telling its advantageous story. These two ideas introduced and practiced by the farmers of our county, inspire hope, confidence and buoyancy of spirits that were absent but a few years ago. Nor are these conditions among farmers of our country without adequate reason. We have had plagues in this grove, and it has been the home of many nice fox-squirrels. But the master of all grasses, old blue grass, is fast getting its deadly grasp upon the tree roots, and the trees are dying out at a rapid rate. In a few more years there will only be stumps to show, where now stands a very fine grove with no underbrush, but carpeted with the best pasture that nature produces.

Blue grass, with the assistance of the woodchopper's ax, will soon exterminate all the timber in this part of Iowa. My advice to anyone who has a grove that he wishes to keep (if it is in the blue grass belt), is never to thin it out sufficiently for the sun to shine in, and give the grass a start, for it has proven to be sure death to any of our native timber in this locality.

My remarks may appear somewhat rambling, but saving down those tall straight oaks, that I thought would be so nice for a large barn some day, caused me to write about them. Many nice apple orchards are fast succumbing to the deadly power of blue grass. So many people have such a horror of plowing in orchards that they sow them to grass, which soon binds the roots and saps the tree of all moisture, and withered fruit and death of the tree soon follow.

Davis Co., Ia. JOHN H. CURL.

#### WILL IT PAY TO PLANT AND CULTIVATE FOREST TREES?

(Concluded From Last Week.)

Editor RURAL WORLD: When we speak of cutting all the timber off, parties not familiar with the nature or peculiarities of the catalpa would naturally infer that when the trees are once "cut off" that is the end of the timber plantation, but such is not the case. The catalpa is a perpetual or reproducing tree. Cut it down and a sprout starts from the stump, making a finer tree in less time than from the seed. Consequently the first cutting, at the age of say eight or ten years, is much less productive than subsequent cuttings, as this stump sprout often makes a growth the first year of 10 to 15 feet, and as strong roots are now penetrating moist earth the trees continue to make a rapid growth. Where only 500 or 600 are permitted to grow to the acre there will be an average growth of nearly an inch in diameter per year, thus making in the next 12 or 15 years trees large enough for telegraph poles or saw timber worth \$2 to \$4 per tree; but if there were only 400 trees to the acre worth only \$2 net each in 20 years, there is still a net income from the land of \$40 per acre per annum.

The two Crawford county plantations each contain a section of land. One is owned by the K. C. Ft. S. & M. R. R. and the other by a Mr. Hunsell of Massachusetts. Our visit there revealed the fact that entirely too many trees were permitted to remain upon the ground. The plantations are now nearly 20 years old and I presume there is still an average stand of 1,500 trees to the acre, three times as many as there should be. Yet an accurate measurement and close calculation of one of the richer portions of one of these plantations reveals the fact that 50 good telegraph poles can now be cut from this acre, and there are 500 trees that will make telegraph poles in a very few years; in fact would have been large enough at this time had only one-half the number of trees been permitted to stand the last ten years. By measur-

ing and calculating the amount of wood in each tree of this acre, we found that it would produce 6,000 valuable fence posts and a large quantity of firewood; so, notwithstanding the fact that it has been a much neglected plantation, over \$500 can now be realized from each acre of the richer portions of this land, or an annual income for the entire 20 years of over \$35 per acre. This calculation is confined strictly to the richer portions of these plantations. A large portion of the poorer lands will not produce over one-half the amounts stated, there being a large amount of hardpan land on both sections. The figures given are conservative, yet they show an unprecedented production of the soil. One-fifth or even one-sixth of these amounts is more than could possibly be realized from grain raising.

#### BLUE GRASS AN ENEMY OF TREES.

There are a number of other smaller tree plantations of 40 to 100 acres in the state from 10 to 20 years old, all of which bear further testimony of the money-making qualities of forest tree growing. The plantations here referred to are planted almost entirely with catalpas. The reason for planting this tree in preference to other valuable varieties is not simply because it is a fast grower and can be utilized young for fence posts and telegraph poles, but because of its greater value in the production of fine finishing lumber—a lumber not inferior to mahogany.

This communication is being penned upon a desk manufactured from a 10-year-old catalpa tree, the color and fine finish of which is greatly admired. And having been in constant use for nearly 10 years has demonstrated another valuable quality possessed by this tree: It neither warps, shrinks nor smells, and not a joint has shown the least sign of giving.

Yes, it will pay to plant and cultivate any variety of forest tree whose lumber has a fair commercial value. But the lumbermen who go into the native forest and can only cut 4,000 or 5,000 feet of lumber from an acre of ground, with every indication pointing to the fact that they are century trees, cannot be convinced that a cultivated tree plantation can be made to yield 25,000 or 30,000 feet in less than 25 years; yet it is found to be an easy matter to produce in less time 300 trees on an acre of rich bottom land from which could be cut at least 150 feet of valuable lumber per tree, besides many smaller trees that could be utilized for other purposes. Here we have 45,000 feet of valuable lumber worth not less than \$1,000, this being the final cutting of one acre, after several previous thinnings, from which were realized much more than the original cost. Yes! Forest tree growing can be made to pay handsomely in any state in the union. We hope the readers of the RURAL WORLD will seriously consider the forest conditions and the condition in which we are to hand down this heritage, that is left in our keeping, to future generations. Conserve what forests we have and look upon the financial side of artificial plantation of valuable timber; also bear in mind that if at least one-fourth of the land area was covered and kept covered with a growth of forest trees that the other three-fourths would raise more stock, grain, fruit and vegetables than could possibly be raised on the entire land were it all clear of trees. Therefore forest tree growing will pay in more ways than one.

D. C. BURSON,  
Collaborator of the Division of Forestry,  
Topeka, Kan.

#### PEBBLES FROM THE POTOMAC.

Editor RURAL WORLD: The failure of Congress to pass the river and harbor appropriation bill was somewhat of a surprise to the localities which were to be benefited by the improvements contemplated. We are of the opinion that any money appropriated by Congress toward the improvement of rivers and other national waterways is expended for a wise purpose, as it is obvious that whatever tends to facilitate water traffic enriches the people. The farmer is particularly interested in this system of traffic, enabling him to market his produce advantageously. Notwithstanding the railroad competition the water traffic is enormous and wherever practicable is desirable, owing to its inexpensive features, and with improved waterways the cost of transporting merchandise, grain, etc., must, as a logical sequence, become more reasonable, thus furnishing the people with superior facilities to check any attempt on the part of railroad combinations to charge excessive freight rates.

THE PRESIDENT'S GUEST.—Of the immense multitude of strangers and friends who attended the inauguration ceremonies perhaps none was more welcome at the White House than "Uncle Jack" Adams, the man who runs the President's farm in the Buckeye state. Farmer Adams was entertained by the president and we doubt not that Mr. Adams will long remember this exceedingly pleasant occasion. To a reporter Mr. Adams said: "Any man around that part of the country can tell you about me and about the way I run the president's farm. A great many who own farms of their own are not as careful as I am, nor have they made as big a success. We've got 162 acres in the farm and about 10 head of horses, 25 head of cattle and 100 head of sheep. The farm belongs originally to Mrs. McKinley's father, and I have been running it for 21 years."

#### RURAL MAIL DELIVERY.

The remarks recently of Mr. Heaton on the

rural mail system, its benefits, etc., were to the point, concisely and accurately enumerating the principal favorable, advantageous features of this popular innovation of our postal system. We have on numerous occasions endeavored to enlighten the readers of this admirable publication of its progress, consequently it would be superfluous for us, on this occasion, to elaborate on the subject. The liberal appropriation for this system has induced thousands of communities to file applications for free delivery mail routes. The appropriation by Congress of \$5,000,000 will operate about 8,000 routes in all. We truly progress!

#### AMERICAN APPLES.—The American apple is growing more popular in England as the people become acquainted with our superior supply. The London "Chronicle" says that "France is about to follow in the wake of England in taking to the American apple. Happily, however, that does not mean that we shall suffer any diminution in the quantity we annually get, which has risen to 2,000,000 barrels in a season. The American yield has been as much as 210,000 barrels in a season. Indeed, it is probable that the whole of Europe could be supplied without any great difficulty, seeing that every year from 6,000,000 to 10,000,000 barrels of apples are carried in cold storage in the United States."

#### BET SUGAR.—The Census Bureau has issued a report upon the manufacture of beet sugar. From the report we glean that in 1899, the census year, there were 31 beet sugar factories in the United States, distributed among 19 states and one territory. Capital invested, \$20,585,519; output, 71,427 long tons; value, \$7,223,567.

#### AN OPTIMISTIC PROPHET.—Prof. Charles W. Dabney, president of the University of Tennessee, recently appeared before the Industrial Commission and gave valuable information regarding the agricultural condition in the south. Prof. Dabney expressed sentiments exceedingly optimistic. He believes that his section is entering upon an unprecedented period of prosperity which will develop that region's magnificent resources and carry her industries steadily onward.

A NEW BUILDING.—The last Congress appropriated \$5,000 for the drawing up of plans for a new building for the Department of Agriculture. The honorable secretary has assurances that the next Congress will appropriate an adequate sum sufficient to put up a suitable building for the use of the department—a building that will be a credit to the government and of a style pleasing to the eye. The old building has served its day and is much too small for a department of this character.

PRECIOUS STONES.—The report of the United States Geological Survey on the production of precious stones shows that the total output in the United States for 1900 was valued at \$22,210, a gain of 25 per cent over 1899. The stones of greatest value produced in the United States were: Turquoises, \$23,600; sapphires, \$75,000; rhodolite, \$20,000; beryl, \$18,000; quartz crystal, \$10,000; diamonds, \$150.

#### STRAY SPARKS.—Items of interest told in a few lines:

The people of the United States consume 6,000 tons of sugar a day.

The Farmers' Institute held at Luray, Va., recently, was largely attended. Hon. G. W. Kainer addressed the meeting.

The Census Bureau reports that Missouri shipped 19,377 bales of cotton in 1899. Texas leads—3,555,555 bales.

The 31st annual convention of the farmers of Montgomery county was held last week at Sandy Springs, Md. Attendance large and appreciative.

Illinois has 37 rural free delivery routes already established; Iowa has 618.

Alaska has doubled her population in the past ten years. Northward the population is increasing.

The inaugural ball room was a veritable fairyland. The floral decorations alone represented nearly \$15,000; total decorations, \$50,000.

The reminiscences by Joseph Cairn Simpson, Esq., are of absorbing interest. Mr. Simpson handles his journalistic reins with rare ability. To the young as well as the pioneer these recollections of long ago are of entrancing interest.

S. F. GILLESPIE.

Washington, D. C.

#### THAT BERMUDA GRASS PATCH.

Editor RURAL WORLD: Regarding Mr. Case's inquiry in the RURAL WORLD as to whether he shall destroy the patch of Bermuda grass in his pasture, I would say most emphatically, no. It is just where he wants it—in his pasture. I understand the pasture is a permanent one. There could be no better foundation for a permanent pasture than Bermuda grass, and in this climate it will not need, so there is no danger to the cultivated fields. The only way to cause it to spread is to cultivate the ground and carry pieces of turf from field to field. What I would advise Mr. Case to do is to increase the area of this grass. If the situation favors, he will find no grass in the equal as a pasture grass, as the more it is cropped the better it will grow. In the course of four years or so, it will require to be broken up, as the roots will mat so densely that it will not grow well.

THOS. E. MOORE.

Washington Co., Ark.



# The Dairy.

RECOGNITION OF THE DAIRY INDUSTRY.

Mr. Ed. Hosmer presents on this page, in a striking way, some facts that should awaken thought. While conceding that the appropriation of money by the State to the State Horticultural Society (about \$4,000 a year has been given by the society for 15 years or more, to expend in advancing the fruit industry), has been money well spent, and that the Horticultural Department of the State Agricultural College with its chair of Horticulture and equipment for instruction in this line of work have done efficient work, we contend that money and effort spent in the interest of dairying would have done equally as much good; that if half as much money and effort had been spent in advancing the dairy industry it would in ten years' time have added \$10,000 annually to the income of the farmers of Missouri. We are proud of the reputation that has been won for Missouri as the land of the Big Red Apple, and trust this will be maintained; but we do not know any good reason why the dairy industry should have been compelled to wait for recognition. The Missouri Dairy Association has been in existence for 10 years, trying to advance the dairy industry, to do for it what the Horticultural Society has been doing for the fruit industry, but without any aid or recognition from the state.

But we are glad to note the fact that there is not so strong an inclination now to say that "the dairy industry can afford to wait." The new secretary of the State Board of Agriculture, Mr. Ellis, is giving attention to this line of agriculture. The board is co-operating with the Dairy Association, and is now having printed in pamphlet form the proceedings of the last annual dairy convention. It will also give more prominence to dairying in the farmers' institute work than in the past.

We think President Jesse of the State University will soon abandon, if he has not already abandoned, the waiting policy with reference to the dairy industry, and see to it that the Agricultural College is equipped with a chair of Dairy Husbandry. True, the dairy industry of the State is not as large as it was in 1897. The past season I went into the hay field with an umbrella to screen me from the sun. In former years I took a fork and made a hand. Should we add to net profits, as given, cost of enlarging barn, houses for help, and living expenses, it would show that the farm has cleared over \$3,000 during the last year.

Some years ago at a farmers' institute held in this county, I was introduced as a dairyman to President Jesse of our State University. He remarked that he thought horticulture ought to be pushed in Missouri; that the dairy industry could afford to wait. I didn't feel competent to discuss the question with so able a person, but the thought occurred to me that Dr. Jesse traveled with tree men, men paid by the state to wake up an interest in horticulture, and that he had imbibed all of their enthusiasm. Apple raising has been pushed for the past 30 years in Webster County. Let us compare this industry with the dairy business. Last fall we had a very fine apple crop, nearly as large as one Webster County has 30,000 acres devoted to apple orchards. Dr. James, secretary of the County Horticultural Society, thinks we have 10,000 acres tributary to Marshfield as a shipping point. Our local papers give 55 cars as the amount of apples shipped from this station. At 25 cents per bushel, three bushels per barrel, and 200 barrels per car, we find the apple crop on these 10,000 acres to have a value of \$2,500, or 25¢ cents per acre. Our little dairy farm turned out over 250 lbs. of butter. We only had under cultivation last year 300 acres. This will be increased by clearing timber land during the winter to 325 acres.



TIMBELL 2D, AND HER TWIN CALVES, TIM AND BELL.

"BUFF JERSEY" sent the photograph from which the engraving presented on this page was made. He says: "Timbell 2d, is a very superior heifer. She produced a two-year-old 286 pounds of butter in ten months. The photograph was

enlarged our milking barn from 70x90 to 110x90, adding 42 Hoard's model stalls. We have used only 14 of the new stalls this winter, milking constantly 70 cows. We hope to fill up another year to the full capacity of the barn—86 head. We use an old barn for dry cows and young stock. The milking is done in a rock basement that has 30 openings. Windows are eight light, glass 10x12 inches. Nearly two carloads of cement were used in concreting the floors.

Another thing that adds to our expense account is my age. I was born in 1857. The past season I went into the hay field with an umbrella to screen me from the sun. In former years I took a fork and made a hand. Should we add to net profits, as given, cost of enlarging barn, houses for help, and living expenses, it would show that the farm has cleared over \$3,000 during the last year.

Some years ago at a farmers' institute held in this county, I was introduced as a dairyman to President Jesse of our State University. He remarked that he thought horticulture ought to be pushed in Missouri; that the dairy industry could afford to wait. I didn't feel competent to discuss the question with so able a person, but the thought occurred to me that Dr. Jesse traveled with tree men, men paid by the state to wake up an interest in horticulture, and that he had imbibed all of their enthusiasm. Apple raising has been pushed for the past 30 years in Webster County. Let us compare this industry with the dairy business. Last fall we had a very fine apple crop, nearly as large as one Webster County has 30,000 acres devoted to apple orchards. Dr. James, secretary of the County Horticultural Society, thinks we have 10,000 acres tributary to Marshfield as a shipping point. Our local papers give 55 cars as the amount of apples shipped from this station. At 25 cents per bushel, three bushels per barrel, and 200 barrels per car, we find the apple crop on these 10,000 acres to have a value of \$2,500, or 25¢ cents per acre. Our little dairy farm turned out over 250 lbs. of butter. We only had under cultivation last year 300 acres. This will be increased by clearing timber land during the winter to 325 acres.

With the college thus equipped and ready to give instruction in dairying, and the Board of Agriculture recognizing the importance of the dairy industry and aiding in its development through farmers' institutes and by a rigid enforcement of the anti-cow law, it is "up to" the dairyman to do their part in pushing forward the business.

One way in which they can materially aid in putting the dairy industry rapidly to the front is to do just what Mr. Hosmer has done—tell what they are doing through the RURAL WORLD. As Secretary Ellis remarked in our February 27 issue, "God helps those who help themselves." All that the Board of Agriculture, the Agricultural College, the Legislature, the RURAL WORLD and all other agencies can do will have no effect in building up the dairy industry unless the dairyman help themselves by making use of these agencies. Let us hear from you as to your successes, that these may encourage others; and as to your failures, that the way to overcome may be pointed out.

We are pleased to state that at the present time there is a class of 30 young men at the Missouri Agricultural College studying dairying. The number should be five times as great, and will be as soon as the college is prepared with proper buildings and equipment to give instruction equal to that given in Iowa, Wisconsin, Minnesota and other states. When this condition is attained, sons of Missouri farmers will not, as has been the case in many instances, go to other states for instruction in dairying; neither will it be necessary then, as it is now, to send to Iowa and Illinois for a large part of the butter consumed in St. Louis and other Missouri markets.

## THE DAIRY INDUSTRY SHOULD HAVE RECOGNITION BY THE STATE.

Editor RURAL WORLD: With February ends our seventh year in the dairy business.

Sales the past year.....\$7,563.47  
Increase of stock.....150.00

Expenses.....\$7,713.47  
Over \$1,000 of the sales were the products of our dairy—hogs, butter and veal calves.

We include hogs because they were so largely fed on skin milk.

The expense account needs explanation. We built quarters for two families and

## There Are 2400

Disorders incident to the human frame, of which a majority are caused or promoted by impure blood.

The remedy is simple. Take Hood's Sarsaparilla.

That this medicine radically and effectively purifies the blood is known to every druggist, known to hundreds of thousands of people who themselves or by their friends have experienced its curative powers.

The worst cases of scrofula, the most agonizing sufferings from salt rheum and other virulent blood diseases, are conquered by it, while those cured of boils, pimples, dyspeptic and bilious symptoms and that tired feeling are numbered by millions.

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## "ALPHA-DE LAVAL" CREAM SEPARATORS.



THE DE LAVAL SEPARATOR CO. RANGLAND & CO. ST. LOUIS, MO. 74 CLEVELAND STREET, NEW YORK.

### DAIRY NOTES.

The good cow is a comparatively lean one. Corn should never be alone fed to the dairy cow.

Breed is well enough, but it will take feed to show what there is in the breed.

In the dairy generally large yields per animal mean a less cost in making them.

The function of milk giving is maternity and the mother needs shelter, warmth and comfort.

The all-the-year-round cow is the paying cow, and the real dairy cows tend in that direction.

Concentrate your efforts on a small area, thus economizing material and stock, as well as labor.

The chief advantages of the creamery system are cheapness of product from the saving of labor.

Good and regular milking is of the utmost importance, as it develops the milk secreting organs.

Moderate exercise is necessary to maintain health and has a stimulating effect on milk production.

One reason why so little is made out of poultry is because so little effort is made to improve the stock.

The churn should never be filled more than half full and then if the temperature is right it will churn easily.

It is very important that milk or cream is not exposed to anything which would contaminate it by absorption.

The dairy farmer should own the best land, milk the best cows, hire the best hands and make the best profit.

Winter dairying affords a good opportunity to market all kinds of grain and roughness to a good advantage by feeding to the cows.

Butter will come much quicker sometimes than others, due generally to a difference in temperature; use a good thermometer.

HAIRY VETCH—Among the spring catalogs which we have received, none is handier or lists a finer variety of seeds and plants than Currie Bros. Horticultural Guide. It also furnishes directions in the successful cultivation of almost all crops, which may be followed with the utmost confidence, as Messrs. Currie Bros. are seedmen of wide experience and have an enviable reputation for honesty and fair dealing. Among the many specialties the catalog shows, is the Sand or Hairy Vetch, shown above, which is without doubt one of the most valuable

fodder plants for the west and northwestern states. It withstands the severest drought, heat and cold. It is adapted for either a hay crop, for a permanent pasture, or for a pasture for late fall and early spring. The U. S. Department of Agriculture estimates the value of a ploughed-under crop of vetch to equal that of from \$10 to \$45 worth of commercial fertilizers per acre. This is only one of the many things shown in this catalog. A copy will be sent to any reader of the RURAL WORLD free. Address Currie Bros., Milwaukee, Wis.

THE COMBINATION CORN—Over in La Crosse, Wisconsin, is located the largest farm seed growing establishment in the world, namely the John A. Salzer Seed Company. They are so to date in everything that pertains to the pedigree seeds for the farmer and gardener. Last year they introduced a Three-Eared Corn, which at once became amazingly popular and it will be planted this coming year over 100,000 acres, because it is a great producing corn. This year they bring forward Salzer's Early Golden Yellow Combination Dent Corn, a corn of superlative quality, early, big headed, long eared, big cropping variety. A corn that stands among corns as did King Saul among the

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OUR DAIRY PRODUCTS FOR PORTO RICO—Washington, D. C., March 13.—R. H. Pearson, assistant chief of the dairy division of the Bureau of Animal Industry, Department of Agriculture, will leave in a few days for Porto Rico, where he will introduce American dairy products for the purpose of extending our markets in the island.

FARM SEPARATORS—A dairyman of Lyon County, Kansas, put a farm separator in his cow barn, where he was milking sixty cows. A tread power run by a calf was used. Objection was at first raised by the calf, but as it got no breakfast until the work was done it soon tumbled to the situation. Stanchions for the young calves were arranged at one end of the building. A gallon milk crock was placed in front of each calf. In a few minutes after the milk had been taken from the cow it had been run through the separator and fed to the calf. The many advantages of such a plan must be apparent to all. Calf raising is now and will be for years to come an important factor in connection with dairying in Kansas. The danger of stunted calves raised by the old method is well known. The dairy business in late years. The farm separator is doing much to solve this problem. It is also true that pasteurization of the skimmed milk by the creameries has been of great value in calf raising.

—Geo. W. Morgan.

Some cows are more subject to diseases of the udder than others and such animals should be discarded.

## "COMMON-SENSE IDEAS FOR DAIRYMEN."

The need of a practical work on dairying from the cow to the finished product has been acknowledged; but the combination to produce an up to date book was not easily found.

A farmer, a dairyman, a butter and cheese maker and a business man would be a happy combination. The author, Geo. H. Blake, has been successful in these lines, and "Common-Sense Ideas for Dairymen" is the result of his long experience. The extent and scope of the work will be better understood by the chapter headings:

Chapter 1. Selection of Dairy Stock.

Chapter 2. Feeding and Care of Dairy Stock.

Chapter 3. Corn and Clover Culture.

Chapter 4. Milk and Cream Testing.

Chapter 5. Care of Milk.

Chapter 6. Buttermakers and butter-making.

Chapter 7. Cheesemaking.

Chapter 8. Creamery Building.

Chapter 9. Farmers Dairy Clubs.

Chapter 10. Miscellaneous Facts.

The story from the beginning to the end is so well told that the reader will hardly give up its reading till he has finished.

Readers of this paper who are interested in dairying will find the practical information in "Common-Sense Ideas for Dairymen" worth many times the small cost. The book is published by the Elgin Dairy Report, Elgin, Ill. Retail price \$1.

STRONGEST FENCE MADE—This is the most prominent claim made for their fence by our advertising patrons. The Colled Spring Fence Co. of Winchester, Ind. Any man who will read their catalog will not only understand why the claim is made, but will be convinced that it is a fact when he learns that the breaking strain of the fence which we illustrate here is 19,400 pounds. If it were swung across a stream and securely fastened and properly planned, it would sustain without danger practically anything which travels along the public highway. It would appear, therefore, that the claim is not only just, but even modest. In addition the meshes are so small as to keep

in or out all kinds of live stock, even to the smallest pig or lamb. This particular fence is 50 inches high, but it is made in a number of heights for various purposes. It is put up in rolls of 10, 20, 30 or 40 rods each. Another important feature of this fence is the colled spring shape of all the laterals or long wires. The reader will observe this in the motion picture of the fence. This means that the entire fence is one large and complete colled spring which provides for all necessary expansion and contraction in the hottest or coldest weather. As a consequence, the Colled Spring Fence is always tight and well-stretched, and can never by any possibility sag or become loose. Write for catalog and any further information which you may desire.

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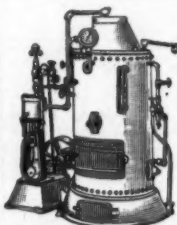
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